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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,681	05/08/2001	John Baker	TTI-001	3254
8791	7590	06/28/2005		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			EXAMINER MURPHY, RHONDA L	
			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,681	BAKER ET AL.	
	Examiner	Art Unit	
	Rhonda Murphy	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on April 12, 2005. Accordingly, claims 69-74 have been canceled and claims 1-68 are currently pending in this application.

Drawings

2. Examiner has reviewed the corrected drawing sheets. Only one Mobile Switch in Figure 1a has been corrected to illustrate reference numeral "18". The second Mobile Switch within the Core Network, shall be designated as "18" as well. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

1. Claim 7 is objected to because of the following informalities:

The word "module", after the word "transmission" should be deleted and "a" should be inserted before "TRX". Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10,12-14,16,20,23-25,27-48,50-52,54,57-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lager et al. (US 6,636,502) in view of Pines et al. (US 2003/0007625).

Regarding claims 1 and 39, Lager teaches a system for providing wireless data services comprising: a) a plurality of mobile stations (Fig. 8, **GPRS-MS**); b) at least one packet data network (Fig. 8, **PDN1** and **PDN2**); c) a wireless access integrated node directly intermediating between the plurality of mobile stations and at least one packet data network to provide a wired or wireless dedicated connection (Fig. 8, **PLMN-SW**; col. 11, lines 40-43; dedicated connections P1, P2), the wireless access integrated node having: i) a plurality of mobile data transmission modules and signaling modules for sending, processing, and receiving data packets (Fig. 8, modules **SCM**, **SEL**, **MSC/VLR**, **NIP-RC** and transceiver (not shown) connected to the antenna of **PLMN-SW**, for communication with the **GPRS-MS**); ii) a plurality of interfaces and ports for sending messages to and receiving messages from at least one packet data network, systems, and mobile stations interconnected with the wireless access integrated node (col. 11, lines 17-24, 51-59); iii) a database containing subscription and operating information for the plurality of

mobile stations attached to the wireless access integrated node (Fig. 8, **HLR/SP**; col. 12, lines 66-67, col. 13, lines 1-3; col. 15, lines 32-36); iv) a main controller to coordinate and control the mobile data transmission modules, signaling modules, interfaces, and database (Fig. 8, **AC**; col. 12, lines 57-65). d) a radio interface interconnecting the plurality of mobile stations and the wireless access integrated node (represented by "**Sending NIP**" signal in Fig. 8); and e) a network interface interconnecting the wireless access integrated node and at least one packet data network (represented by **P1** and **P2** lines in Fig. 8; col. 11, lines 51-59).

Although Lager teaches a dedicated connection, Lager fails to explicitly disclose a dedicated broadband connection.

However, it is known in the art that wireless networks consist of broadband connections.

In view of this, it would have been obvious to one skilled in the art to include a dedicated broadband connection, in order to provide a high speed, dedicated path for the subscribers to efficiently transmit data within the network.

Lager fails to teach a database containing charging information for the plurality of mobile stations attached to the wireless access integrated node.

However, it is known in the art that charging information is stored in a database for billing subscribers. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to include a database containing charging data in order to record subscriber use/access to the network.

Lager also fails to teach a main controller for collecting charging data.

However, Pines teaches a main controller (Fig. 1, **service provider 26**) for collect charging data (page 16, paragraph 0200).

In view of this, having the system of Lager and then given the teachings of Pines, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by collecting charging data within the main controller, in order to maintain subscriber records within a centralized location.

Regarding claims 2 and 40, Lager further teaches a system wherein the packet data network is an Internet (the enclosed circle of Fig. 8).

Regarding claims 3 and 41, Lager further teaches a system wherein the packet data network is an intranet (Fig. 8, **PDN2**).

Regarding claims 4 and 42, Lager further teaches a system wherein a content server is attached to the intranet (Fig. 8, **Radius server**).

Regarding claims 5 and 43, Lager further teaches a system wherein the mobile data transmission module is a PDCP module (col. 8, lines 6-8).

Regarding claims 6 and 44, Lager further teaches a system wherein the mobile data transmission module is a RLC/MAC module (col. 5, lines 28-39; note col.10, lines 66-67, col. 11, lines 1-5).

Regarding claims 7 and 45, Lager further teaches a system wherein the mobile data transmission module is a TRX module (Fig. 8, transceiver (not shown) connected to the antenna of PLMN-SW, for communication with the GPRS-MS).

Regarding claims 8 and 46, Lager further teaches a system wherein the signaling module is Radio Resource Management (module (not shown) located within SGSN of Fig. 8, col. 8, lines 6-30).

Regarding claims 9 and 47, Lager further teaches a system wherein the signaling module is GPRS Mobility Management (SCM of Fig. 8, col. 14, lines 64-67, col. 15, lines 1-10; wherein the SCM provides security by permitting or denying access to the packet data network).

Regarding claims 10 and 48, Lager further teaches a system wherein the signaling module is Session Management (NIP-RC of Fig. 8, col. 12, lines 49-54).

Regarding claims 12 and 50, Lager further teaches a local information system interface (Fig. 8, IP-TUN line).

Regarding claims 13 and 51, Lager further teaches an appliance control interface (Fig. 8, P1 line).

Regarding claims 14 and 52, Lager further teaches a system wherein the interface is an intranet gateway (an intranet gateway interface is inherent in the system depicted in Fig. 8, since an interface is required for the exchange of data between the access node of PLMN-SW and the intranet of PDN2).

Regarding claims 16 and 54, Lager teaches a local information system interconnected with the wireless access integrated node (Fig. 8, ISP2).

Regarding claims 20 and 57, Lager teaches a local appliance control system interconnected with the wireless access integrated node (Fig. 8, PDN2).

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Regarding claims 23 and 58, Lager teaches a wireless data collector interconnected with the wireless access integrated node (Fig. 8, **GPRS-MS**; col. 15, lines 10-15).

Regarding claims 24 and 59, Lager teaches a system wherein the radio interface is a GPRS radio interface (GPRS-MS transmits over radio interface represented by "Sending NIP" signal in Fig. 8).

Regarding claims 25 and 60, Lager teaches a system wherein the network interface is an IP interface (Fig. 8, **IP-TUN** line connected to **ISP2**).

Regarding claims 27 and 61, Lager teaches mobile transmission modules including means for modulating data packets (it is well known in the art that data packets are modulated for transmission over a communication network).

Regarding claims 28 and 62, Lager teaches mobile transmission modules including means for compressing data packets (col. 3, lines 64-67, col. 4, lines 1-2).

Regarding claims 29 and 63, Lager teaches mobile transmission modules including means for encrypting data packets (col. 3, lines 41-45).

Regarding claims 30 and 64, Lager teaches mobile transmission modules including means for multiplexing data packets (multiplexing data packets are known in the art for transmitting signals over a single channel; TDMA is supported by GPRS, thus multiplexing is inherent).

Regarding claims 31 and 65, Lager teaches mobile transmission modules including means for correcting errors in data packets (error correction in data packets are well known in the art for proper data reception).

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Regarding claims 32 and 66, Lager teaches mobile transmission modules including means for segmenting data packets (it is known in the art that data packets are segmented - encapsulated and decapsulated for transmission among different network protocols; col. 5, lines 32-39).

Regarding claims 33 and 67, Lager teaches mobile transmission modules including means for controlling the sequence of data packets (controlling the sequence of data packets is well known in the art, and occurs within the access control unit, **AC**, in Fig. 8).

Regarding claim 34, Lager teaches a wireless access integrated node including means for supporting mobile stations roaming between a local wireless access integrated node environment and a public mobile network (Fig. 4, col. 5, lines 56-67).

Regarding claims 35 and 37, Lager teaches a wireless access integrated node including means for supporting mobile stations roaming between different wireless access integrated node systems (col. 5, lines 56-67).

Regarding claim 36, Lager teaches a wireless access integrated node includes means for providing wireless data services in a community service area located within cells of a public network (Fig. 8, public networks **ISP's**) when the wireless access integrated node is clustered with several other wireless access integrated node systems (Fig. 3, PLMN A and PLMN B).

Regarding claims 38 and 68, Lager teaches a wireless access integrated node including means for configuring the wireless access integrated node as a network node (Fig. 8, col. 11, lines 6-16).

3. Claims 11,15,49 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lager in view of Gaffney (US 6,333,919).

Regarding claims 11 and 49, Lager teaches a system with interfaces.

Lager fails to explicitly teach a voice interface.

However, Gaffney teaches a system with voice interfaces (Fig. 1, **interface 110** and **120**).

In view of this, having the system of Lager and then given the teachings of Gaffney, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by including a voice interface, in order to provide a link for the exchange of voice data between devices.

Regarding claims 15 and 53, Lager teaches a system having ports.

Lager fails to explicitly teach an RJ11 port for a fixed wired telephone connection.

However, Gaffney teaches a fixed wire telephone connection (Fig. 1, desk phone **450**; col. 4, lines 55-56) and it is known in the art that desk phones commonly use an RJ11 jack.

In view of this, having the system of Lager and then given the teachings of Gaffney, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by including an RJ11 port, in order to provide a connection for telephone use.

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4. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lager in view of Doviak et al. (US 6,418,324).

Regarding claim 17, Lager teaches a wireless access integrated node with a local information system.

Lager fails to teach means for remotely synchronizing a personal digital assistant with its host program.

However, Doviak teaches means for remotely synchronizing a personal digital assistant (Fig. 1, **PDA 52**) with its host program (**MDC 54**; col. 9, lines 4-20).

In view of this, having the system of Lager and then given the teachings of Doviak, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by remotely synchronizing a personal digital assistant with its host, in order to provide a user with a wider coverage area and more efficient service.

5. Claims 18-19, 21-22 and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lager in view of Swartz (US 2003/0053444).

Regarding claims 18 and 55, Lager teaches a wireless access integrated node and commands from the mobile station to the local information system.

Lager fails to teach voice recognition means for audibly relaying service request commands.

However, Swartz teaches voice recognition means for audibly relaying service request commands (page 7, paragraph 72).

In view of this, having the system of Lager and then given the teachings of Swartz, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by including voice recognition means, in order to allow the user to verbally request information from the local information system.

Regarding claims 19 and 56, Lager teaches a wireless access integrated node relaying information from the local information system to the mobile station.

Lager fails to teach text-to-speech means for audibly relaying information.

However, Swartz teaches text-to-speech means for audibly relaying information (page 7, paragraph 74).

In view of this, having the system of Lager and then given the teachings of Swartz, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by including text-to-speech means, in order to allow the user to receive audio data which was originally in text form.

Regarding claim 21, Lager teaches a wireless access integrated node and commands from the mobile station to the appliance control system.

Lager fails to teach voice recognition means for audibly relaying service request commands.

However, Swartz teaches voice recognition means for audibly relaying service request commands (page 7, paragraph 72).

In view of this, having the system of Lager and then given the teachings of Swartz, it would have been obvious to one having ordinary skill in the art at the time the

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invention was made, to modify the system of Lager, by including voice recognition means, in order to allow the user to verbally request information from the appliance control system.

Regarding claim 22, Lager teaches a wireless access integrated node relaying an appliance status report delivered from the appliance control system to the mobile station.

Lager fails to teach text-to-speech means for audibly relaying the report.

However, Swartz teaches text-to-speech means for audibly relaying information (page 7, paragraph 74).

In view of this, having the system of Lager and then given the teachings of Swartz, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by including text-to-speech means, in order to allow the user to receive audio data which was originally in text form.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lager in view of McNiff et al (US 2003/0076808).

Regarding claim 26, Lager teaches a system including means for enabling a mobile station user to obtain a temporary subscription to the wireless access integrated node through a dynamic registration (col. 12, lines 66-67, col. 13, lines 1-12).

Lager fails to teach a temporary subscription and cancellation process in which the user's mobile station's subscription identity is linked with the mobile equipment identity.

However, McNiff teaches a temporary subscription and cancellation process (page 3, paragraph 36) in which the user's mobile station's secret subscription identity (page 3, paragraph 29) is linked with the user's mobile station's mobile equipment identity (page 3, paragraph 28).

In view of this, having the system of Lager and then given the teachings of McNiff, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Lager, by including a temporary subscription and cancellation process, in order to restrict access to registered users and maintain a secure network.

Response to Arguments

7. Applicant's arguments filed on April 12, 2005 have been fully considered but they are not persuasive. Referring to Figure 8 of Lager et al. (US 6,636,502), the wireless access integrated node (PLMN-SW) directly intermediates between the mobile stations (GPRS-MS) and at least one packet data network (PDN2). Examiner interprets "directly" as meaning there are no devices or nodes positioned in between the wireless access integrated node and mobile station; nor between the wireless access integrated node and the packet data network.

In addition to the applicant's admitted prior art relating to a database storing operational data (page 9, lines 33-36 of the specification), Lager further teaches a database containing operational information (col. 15, lines 32-36).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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Rhonda Murphy
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